MARYLAND HISTORICAL TRUST DETERMINATION OF ELIGIBILITY FORM

5M-902

Property Name: NATS Seaplane Hangar 301; NAS Patuxent River	Inventory Number:	Contrib.Res.
Address: NATS Seaplane Hangar 301; NAS Patuxent River	Historic district:	yes X no
City: NAS Patuxent River Zip Code: 20670	County: Saint	Marys
USGS Quadrangle(s): Solomons Island		
Property Owner: US Navy / Naval Air Station Patuxent River	Tax Account ID Number	r:
Tax Map Parcel Number(s): Tax Map N	lumber:	
Project: Ag	gency: NAVY	
Agency Prepared By: The Louis Berger Group, Inc.		
Preparer's Name: Richard M. Casella	Date Prepared:	5/1/1999
Documentation is presented in: Maryland Inventory of Historic Properties for	orm.	
Preparer's Eligibility Recommendation: X Eligibility recommen	ded Eligib	oility not recommended
Criteria: X A B X C D Considerations: A	B C D	EFG
Complete if the property is a contributing or non-contributing reso	ource to a NR district/proper	ty:
Name of the District/Property: Patuxent River N.A.S.		
Inventory Number: SM-357 Eligible: X	yes Listed:	yes
Site visit by MHT Staf yes no Name:		Date:
Description of Property and Justification: (Please attach map and photo)		
roughly square building (385 feet wide by approximately 350 feet deep) sits a former Seaplane Ramp No. 1172. Concrete aprons surround the hangar, common in turn leads to the Air Station's runways. Hangar 301 is a double-bay hangar inch per foot) and sliding doors in the front and rear. Two-story, steel-frame, located down each side of the building; these structures serve the dual purpose providing useful office and workshop space. Hangar 301 played a central role in the mission of the NATS at NAS Patuxen Register under Criterion A. The hangar also meets National Register Criterio a type, period, and method of construction. Although Hangar 301 has undergretains sufficient architectural integrity of its key engineering elements to meet	with a nearly flat roof (pitch lean-to-structures measuring e of resisting lateral wind load t River and is therefore eligible of in that it embodies distince interior and exterior alter	with Taxiway A, which to center equals 1/4- 32 feet deep are ds on the hangar and ble for the National ctive characteristics of rations over the years, it
	et engionity criteria for the iva	itional Register.
See MIHP form for more information.		
MARYLAND HISTORICAL TRUST REVIE		
Eligibility recommended Eligibility not recommended		
Criteria: XA B XC D Considerations: A	BCD	EFG
MHT Comments:		
Andread Land	(122/05	
Reviewer, Office of Preservation Services	0/22/09 Date	
13 Vinte	6/21/05	
Reviewer, National Register Program	Date	

NPS Form 10-900 (Rev. 10-90) OMB No. 10024-0018

5M-902

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property			
historic name NATS Seaplane Hangar 301, NAS Patuxent River	SM 35/		
other names/site number			
2. Location			
street & number	not for publication		
city or town Naval Air Station Patuxent River	vicinity X		
state Maryland code MD county St. Mary's code	037 zip code <u>20670</u>		
3. State/Federal Agency Certification			
As the designated authority under the National Historic Preservation At that this nomination request for determination of eligibility m registering properties in the National Register of Historic Places and me requirements set forth in 36 CFR Part 60. In my opinion, the property National Register Criteria. I recommend that this property be consider statewide locally. (See continuation sheet for additional comments.)	eets the documentation standards for eets the procedural and professional meets does not meet the		
Signature of certifying official Da	ate		
State or Federal agency and bureau			
In my opinion, the property meets does not meet the National (See continuation sheet for additional comments.)	al Register criteria.		

Signature of commenting or other of	ficial		Date		
State or Federal agency and bureau					
1. National Park Service Certificat	ion			7.	
, hereby certify that this property is:					
 entered in the National Register See continuation sheet. determined eligible for the National Register See continuation sheet. determined not eligible for the National Register 					-
removed from the National Re				0	-
other (explain):			*		
	Signature of	Keeper		Date of Action	e)
5. Classification					
Ownership of Property (Check as many boxes as apply) private public-local public-StateX public-Federal			ory of Property c only one box) building(s) district site structure object		
Number of Resources within Propo	erty				
Contributing Noncontributing	buildings sites structures objects				

sheets.)

Number of co	ontributing resources previously	y listed in the	National Register:0			
Name of rela	ted multiple property listing (E	nter "N/A" if p	property is not part of a multip	le property listing.)		
Naval Air S	Station Patuxent River, Marylar	nd: Historic a	nd Architectural Resources	<u> </u>		
6. Function of	or Use		10			
Historic Funct Cat:	tions (Enter categories from instru 		Naval facility	_		
		_				
Current Funct Cat:	Current Functions (Enter categories from instructions) Cat: Sub: Naval facility					
		_				
7. Descriptio	on _					
Architectural	Classification (Enter categories fr Other: 20th-Century indus	military	s):			
Materials (Enfoundarios) roof walls	ter categories from instructions) ation Concrete Wood, asphalt Metal-steel, masonry, asbestos-panel					

Narrative Description (Describe the historic and current condition of the property on one or more continuation

8. Sta	itemen	t of Si	gnificance
			Il Register Criteria more boxes for the criteria qualifying the property for National Register listing)
	X	Α	Property is associated with events that have made a significant contribution to the broad patterns of our history.
	_	В	Property is associated with the lives of persons significant in our past.
	X	С	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
	·	D	Property has yielded, or is likely to yield information important in prehistory or history.
	ia Cons		ions boxes that apply.)
		Α	owned by a religious institution or used for religious purposes.
	_	В	removed from its original location.
		С	a birthplace or a grave.
		D	a cemetery.
	_	E	a reconstructed building, object, or structure.
		F	a commemorative property.
		G	less than 50 years of age or achieved significance within the past 50 years.
Areas	of Sig	nifican	Architecture Engineering Military

Period of Significance	e		
	1945-1965		
			
Significant Dates			
Oiginiount Dutes			
Significant Person (Complete if Criterion B is marked above)		
	_N/A		
Cultural Affiliation	_N/A		
Cultural Armiation			
Architect/Builder	U.S. Navy, Bureau of Yards and Docks		
Architect/bullder	- O.O. IVAVY, Buildad of Tailas and Books		
Narrative Statement sheets.)	of Significance (Explain the significance of the property on one or more continuation		
Silects./			
9. Major Bibliographi	cal References		
(Cite the books, article	es, and other sources used in preparing this form on one or more continuation sheets.)		
Previous documentation	on on file (NIPC)		
	inary determination of individual listing (36 CFR 67) has been requested.		
previously listed in the National Register			
previously determined eligible by the National Register			
designated a National Historic Landmark recorded by Historic American Buildings Survey #			
recorded by Historic American Engineering Record #			
Primary Location of A	Iditional Data		
Primary Location of Ac	dditional Data Historic Preservation Office		
X State Other	Historic Preservation Office State agency		
State Other Federa	Historic Preservation Office State agency al agency		
State Other Federa	Historic Preservation Office State agency al agency government		
State Other X Federa Local	Historic Preservation Office State agency al agency government		

10. Geographical Data			
Acreage of Property 5 acres			
UTM References (Place additional UTM references on a continuation sheet)			
Zone Easting Northing Zone Easting Northing 1 18 373250 4238300 3			
Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.) See Continuation Sheet			
Boundary Justification (Explain why the boundaries were selected on a continuation sheet.) See Continuation Sheet 11. Form Prepared By			
name/title Richard M. Casella			
organization The Louis Berger Group, Inc. date May 1999			
street & number 120 Halsted Street telephone 973-678-3427			
city or town <u>East Orange</u> state <u>NJ</u> zip code <u>07019</u>			
Additional Documentation			
(Submit the following items with the completed form:)			
Continuation Sheets			
Maps: A USGS map (7.5 or 15 minute series) indicating the property's location. A sketch map for historic districts and properties having large acreage or numerous resources			

Photographs: Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner				
(Complete this item at the request of the SHPO or FPO.)	-			
name Naval Air Station Patuxent River				
street & number	telephone			
city or town Patuxent River state	MD zip code <u>20670</u>			

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

NPS Form 10-900-a (8-86)

OMB No. 10024-0018

5M-902

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section _7 Page _1_

NATS Seaplane Hangar 301, NAS Patuxent River St. Mary's County, Maryland

DESCRIPTION

Seaplane Hangar 301 is located in the northwest corner of the base, adjacent to the West Patuxent Seaplane Basin. This large, roughly square building (385 feet wide by approximately 350 feet deep) sits about 400 feet southeast of the basin shoreline and former Seaplane Ramp No. 1172. Concrete aprons surround the hangar, connecting it with the ramp and with Taxiway A, which in turn leads to the Air Station's runways. Hangar 301 is a double-bay hangar with a nearly flat roof (pitch to center equals ¼-inch per foot) and sliding doors in the front and rear. Two-story, steel-frame, lean-to structures measuring 32 feet deep are located down each side of the building; these structures serve the dual purpose of resisting lateral wind loads on the hangar and providing useful office and workshop space.

The hangar bays each have a clear width of 160 feet and a clear height of 32 feet, 6 inches, measured to the top of the doors. The roof over each bay is supported by a flat, subdivided Pratt truss measuring 160 feet long. The trusses are carried by the steel posts at the lean-to end and by a heavy truss running front to back through the center of the building. The center truss is supported by only three posts, one at each end between the doors and one in the center, dividing the hangar into two structural bays. Although the roof trusses are described as flat, they taper in depth from 13 feet, 4 inches at the lean-to end to 16 feet, 8 inches at the center girder. This design creates a self-draining roof and allows the increased depth needed for the center truss. Each roof truss is divided into 12 panels, each panel measuring 13 feet, 4 inches wide. The upper half of each panel (above the diagonal) is divided again with another vertical and diagonal member. The extra vertical member provides an added bearing point for the roof beams, allowing them to be spaced 6 feet, 8 inches on center.

For larger hangars, the flat steel truss is more widely used than the common bowstring truss. This is because of the high center section of the bowstring, which greatly increases the roof area as the truss length increases, thereby increasing the cost of roofing and the cost of heavier framing necessary to resist the resultant higher wind loads.

The multi-leaf, straight-sliding doors open to the full width of the bays by sliding into door pockets located on the front of the lean-to sections. The doors have steel frames with inset plywood kick panels up to 8 feet, with multi-pane lights above. Two roll-up metal vehicle doors have been retrofitted into two leaves of the east doors to provide more convenient vehicle access.

The exterior of the hangar, which was originally clad in corrugated galvanized-steel sheet metal, has been resided with a similarly corrugated aluminum sheet siding. The original wood multi-pane windows that ran in a long, wide band down each side of the hangar lean-tos, have been replaced with smaller, aluminum-framed awning windows with solid flush aluminum panels above. Many of the window openings have been completely closed with solid panels.

NPS Form 10-900-a (8-86) OMB No. 10024-0018

SM-902

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8 Page 2

NATS Seaplane Hangar 301, NAS Patuxent River St. Mary's County, Maryland

SIGNIFICANCE SUMMARY

Evaluation of the Naval Air Transport Service (NATS) Seaplane Hangar 301 for National Register eligibility is based upon criteria outlined in the National Register of Historic Places Multiple Property Documentation Form Naval Air Station, Patuxent River, Maryland, Historic and Architectural Resources, under the property type "Air Transport Facilities." Seaplane Hangar 301 is significant under the historic context defined in the Multiple Property Documentation study, Naval Air Station, Patuxent River and Webster Field During World War II, 1941-1945.

Hangar 301 played a central role in the mission of the NATS at NAS Patuxent River and is therefore eligible for the National Register under Criterion A. The hangar also meets National Register Criterion C in that it embodies distinctive characteristics of a type, period, and method of construction. Although Hangar 301 has undergone interior and exterior alterations over the years, it retains sufficient architectural integrity of its key engineering elements to meet eligibility criteria for the National Register.

The NATS is directly associated with the mission of NAS Patuxent River as the location of an East Coast terminal for Navy air transport or air logistical services. This role as air transport terminal was an important element of the original design of NAS Patuxent River as it was developed in the winter of 1941-1942 as a direct response to the United States's entrance into the war. During the period 1943-1948, NAS Patuxent River served as headquarters for the Atlantic Wing of the Naval Air Transport Service, which supervised NATS operations throughout the Atlantic coasts of the Americas, Europe, and Africa. NAS Patuxent River resumed the role of headquarters for air logistics formations for the period 1949-1957, this time on the national level for the Fleet Logistics Air Wing (FLAW). Navy air logistics units remained stationed at NAS Patuxent River until 1968.

RESOURCE HISTORY AND HISTORIC CONTEXT

Construction of Hangar 301 began June in 1942 under the first contract for general construction at Cedar Point NAS (Contract NOy-5363), awarded to Cummins Construction Company and Riggs Distler and Company. Dissatisfied with the contractors work, the Navy canceled the contract in February 1943 and within a few weeks awarded a new contract (NOy-5984) to Consolidated Engineering Company, who completed the hangar in May 1943.

When the NATS began operations at NAS Patuxent River in July 1943, its facilities consisted of the NATS Administration Building (304) and Seaplane Hangar (301), situated on the air station's West Patuxent Seaplane Basin. The NATS complex expanded with a utility building (307) in October 1943 and two concrete Landplane Hangars (305 and 306) in December of the same year. The complex was completed with the construction of the NATS Terminal Building (310) in May 1944.

OMB No. 10024-0018

SM-902

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8 Page 3

NATS Seaplane Hangar 301, NAS Patuxent River St. Mary's County, Maryland

The NATS was responsible for the movement of men, equipment, and supplies by air, primarily for the Navy and Marine Corps, but also for the Army and civilian government agencies, when necessary. Three NATS squadrons, VR-1, VR-8, and VR-9, served at NAS Patuxent River, which was also the location of the headquarters for the NATS Command, Atlantic Wing. Created at the onset of the American commitment to the war, when for practical purposes the U.S. Navy lacked any air transport capability, NATS built an air fleet and a system of routes that contributed considerably to Allied victory. The services of the NATS were frequently used by the U.S. Army, other agencies of the U.S. government, and the armed services of other Allies.

The NATS was the brainchild of Commander Clarence H. Schildhauer, a Naval Reserve officer and aeronautics professional who had formerly worked for Pan American Airways. During the period 1939-1941, Schildhauer was moved by the seeming threat of American involvement in the ongoing world war to consider the potential need for air transport in American naval operations if the United States entered the war. Prior to 1942, the Navy had no airborne component in the logistical network that supplied its far-flung installations around the Atlantic and Pacific basins, apart from a relatively few semi-converted bombers flown by the Navy's utility squadrons. The utility squadrons carried a small volume of cargo between stateside supply depots and the operating units of the Atlantic and Pacific fleets. The potential wartime need to move vital commodities across the ocean with the greatest possible dispatch had not been seriously addressed by American naval planners in the 1930s. Between July and September 1941, Schildhauer presented the Navy with an organizational scheme for an airborne cargo and personnel transport service that was based on the international operations of the country's airline companies.

The Navy responded to Commander Schildhauer's proposal in November 1941 by bringing him to active duty with the Naval Transport Service, then a section of the Ship Movements Division, with authorization to implement his plan. On 12 December 1941, with the war just five days old for America, the Chief of Naval Operations approved the establishment of the NATS as a branch of the Naval Transport Service, with Schildhauer as Officer-in-Charge. The initial hurdle that the NATS had to clear in order to attain full-scale operation was to accrue an adequate complement of suitable aircraft; this task must have seemed insurmountable. There were only 16 transport airplanes in the United States at that time, including both seaplanes and landplanes, that were capable of transoceanic flight, and another three seaplanes were then under construction. All of these aircraft were privately owned. The same day that the NATS was established, the Office of the Chief of Naval Operations also moved to induct these transport planes, along with their civilian crews, into naval service.

During 1944, that important year in which the Allies consolidated their ascendant position and began their drive toward the Axis homelands, the NATS overall grew from 8,060 personnel and 179 aircraft to 20,545 personnel and 352 aircraft. A high point in the wartime service of VR-1 came in May 1944, in response to an emergency request from the Chief of Naval Operations. Eight *Skymaster* transports, making a total of 16 trans-Atlantic flights over a nine-day period, moved 83 tons of vital minesweeping equipment to England for the Normandy invasion.

April 1945 saw the return of the "mighty Mars" seaplane from the Pacific to NAS Patuxent River, once again in the care of VR-8. The Navy had decided to acquire additional Martin Mars planes (designated JRM aircraft) and give the

NPS Form 10-900-a (8-86)

OMB No. 10024-0018

SM-902

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8 Page 4

NATS Seaplane Hangar 301, NAS Patuxent River St. Mary's County, Maryland

great flying boat a prominent role in its air transport establishment. VR-8 was reassigned the first Mars to use in training additional crews to fly the great aircraft, and a new U-slip type of floating dock, designed to handle the Mars, was constructed at NAS Patuxent River. In August 1945, with Germany defeated and trans-Atlantic transport a reduced priority, VR-9 was transferred to the NATS station at Olathe, Kansas.

OMB No. 10024-0018

SM-902

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8 Page 5

NATS Seaplane Hangar 301, NAS Patuxent River St. Mary's County, Maryland

MARYLAND COMPREHENSIVE PRESERVATION PLAN DATA

Geographic Organization: Western Shore

Chronological/Developmental Period(s): Modern Period

Prehistoric/Historic Period Theme(s): Military

Resource Type:

Category: Building

Historic Environment: Suburban

Historic Function(s) and Use(s): Military Facility

Known Design Source: U.S. Navy, Bureau of Yards and Docks

SM-902

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 9 Page 6

NATS Seaplane Hangar 301, NAS Patuxent River St. Mary's County, Maryland

MAJOR BIBLIOGRAPHICAL REFERENCES

Harvey, Emil K.

1941 General Designs and Materials Used in Hangar Construction. Aero Digest 39(August):101-104.

Louis Berger & Associates, Inc.

1999 Naval Air Station Patuxent River, Maryland, Historic and Architectural Resources. National Register of Historic Places Multiple Property Documentation Form (draft final). Prepared for Naval Air Station Patuxent River, Maryland, by Louis Berger & Associates, Inc., East Orange, New Jersey.

NAS Patuxent River Public Works Department

various Map of Naval Air Station, Patuxent River, Md., Showing Conditions on . . . [various dates, 1941-present]. Plans on file, Public Works Department, Naval Air Station Patuxent River, Maryland.

various Facility Record Cards and Building Drawings, Naval Air Station, Patuxent River, Md. Records and drawings on file, Drawing Vault, Public Works Department, Naval Air Station Patuxent River, Maryland.

Naval Historical Center

1945 Naval Air Station Patuxent River Command History, 1942-45. Prepared October 1945. On file, Office of Naval Aviation History, Naval Historical Center, Washington Navy Yard, Washington, D.C.

various U.S. Naval Air Test Center-NAS Patuxent River Command Histories [various dates]. On file, Office of Naval Aviation History, Naval Historical Center, Washington Navy Yard, Washington, D.C.

U.S. Geological Survey

1987 Solomons Island, MD. 7.5-Minute Series (Topographic) Quadrangle. U.S. Geological Survey, Reston, Virginia.

United States Navy, Bureau of Yards and Docks

1942 Y. & D. Drawing No. 195724, Seaplane Hangar. On file, Public Works Department, Naval Air Station Patuxent River, Maryland.

OMB No. 10024-0018

SM-902

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 10 Page 7

NATS Seaplane Hangar 301, NAS Patuxent River St. Mary's County, Maryland

GEOGRAPHICAL DATA

Verbal Boundary Description

The National Register boundaries for the NATS Seaplane Hangar 301 are depicted on the attached figure.

Boundary Justification

The boundaries encompass the entire area within which the NATS Seaplane Hangar 301 operated during its period of significance.

5M-902

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES **CONTINUATION SHEET**

Section Photos Page 8

NATS Seaplane Hangar 301, NAS Patuxent River St. Mary's County, Maryland

The following items apply to all five photographs:

Property Name:

NATS Seaplane Hangar 301, Naval Air Station Patuxent River

Location:

NAS Patuxent River, St. Mary's County, Maryland

Photographer:

Richard M. Casella

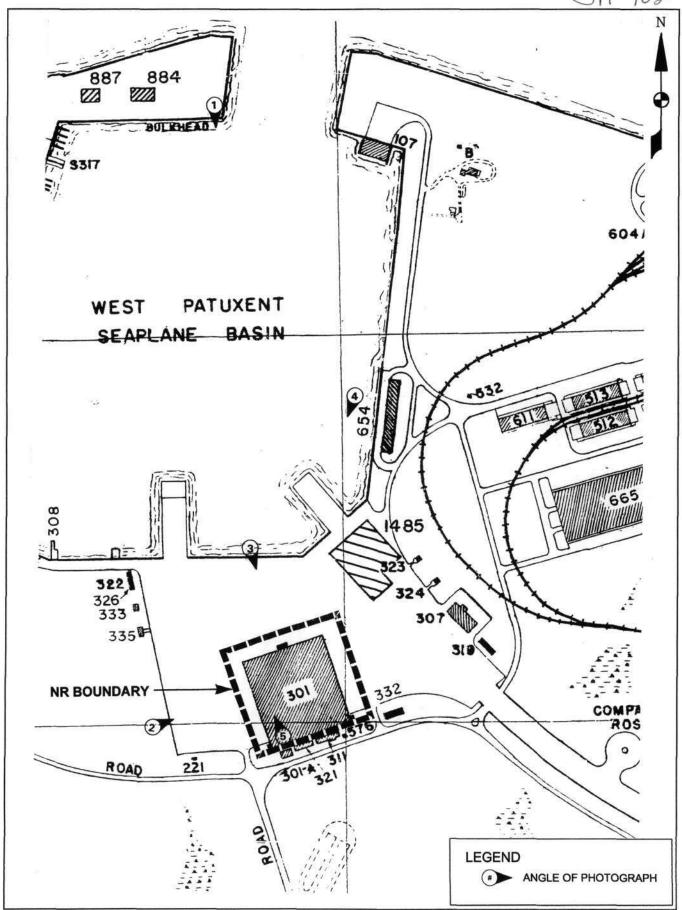
Date of Photograph:

1999

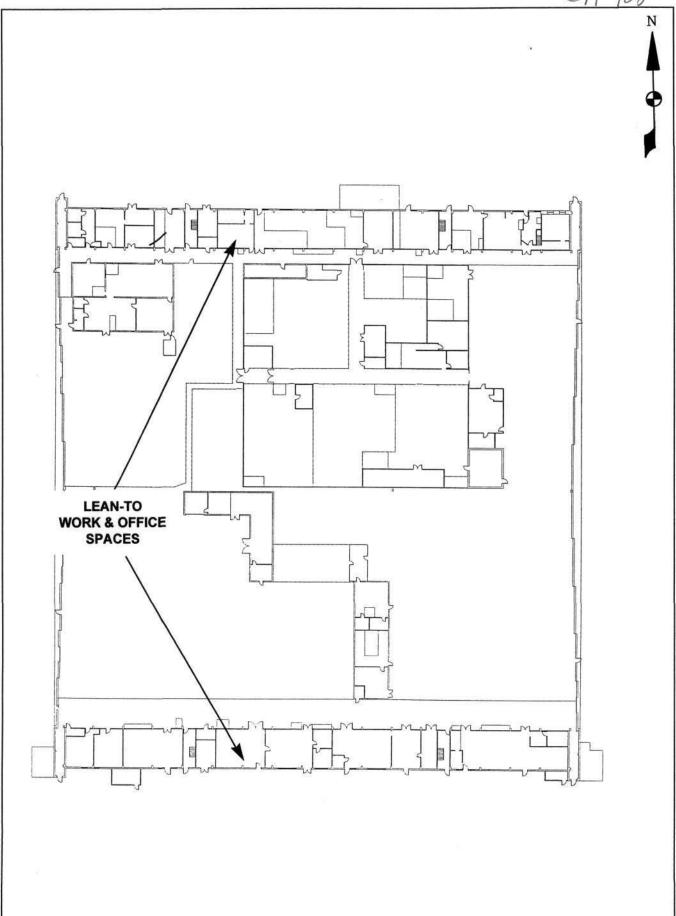
Location of Negatives: NAS Patuxent River, Patuxent River, Maryland 20670

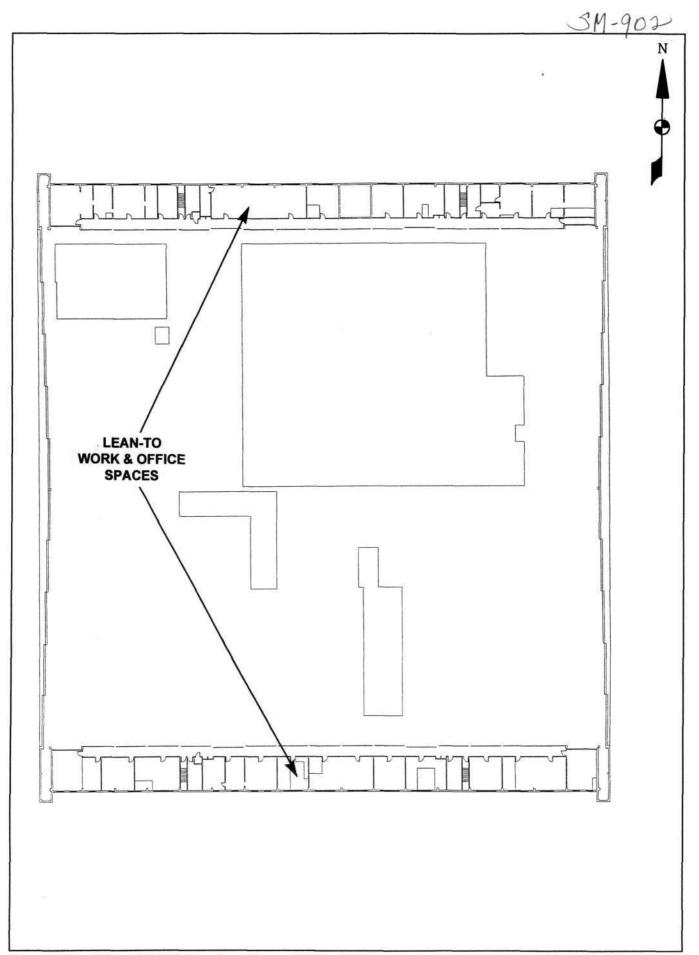
Individual Photograph Identifications:

- 1 Overall view of hangar across West Patuxent Seaplane Basin, east and north elevations, looking south
- West elevation, looking east 2
- 3 North elevation, looking south
- North elevation, with Seaplane Ramp No. 1172 in foreground, looking south 4
- Interior of hangar bay, looking north 5

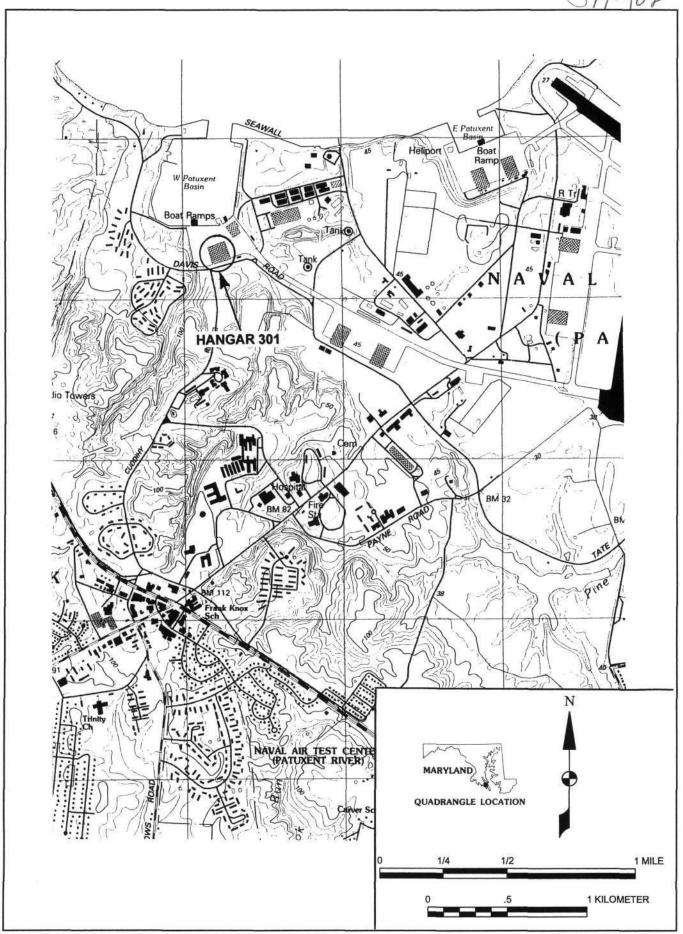


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NATS SEADLANE HANGAR 301 NAVAL AIRSTATION PATURENT RIVER ST. MARYS COUNTY MARY CAND # 1 of 5 SM-902



NATS SEADLANE HANGAR 301 NAVAL AM STATION PATURENT RIVER ST. MANYS COUNTY MANYLAND #2 of 5 10 2 30 30 E

SM-902



NATS SEAPLANE HANGAR 301 NAVAL AND STATION PATERENT RUER ST. MARYS COUNTY MARY LAND #3 of 5

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NATS SEAPLANE HANGAR 301

NAUAL AIR STATION PATURENT RWER

ST MARYS COUNTY MARYLAND

4 4 5

4 of 5 6M-902



NATS SEAPLANE HANGAR 301 NAVAL AIR STATION PATURENT RIVER ST. MARYS COUNTY MARYLAND

5 of 5 SM-902